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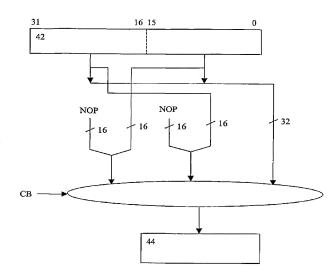
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[Continued on next page]

### (54) Title: MEMORY-EFFICIENT INSTRUCTION PROCESSING SCHEME



(57) Abstract: In a two-dimensional optical storage (TwoDOS) arrangement, at certain places on the optical disc, calibration pits are placed, for instance in the lead-in and/or additionally sparsely in the data. The signal waveform resulting from the read out of the calibration bits is measured, and matrix multiplication is performed on these signals to obtain the linear interference coefficients. This can be done since the bit sequence is known (along all of the bit-rows of the 2D patterns). From these linear interference coefficients, the electric field distribution of the read-out spots at the pitholes can be reconstructed. This information can be used in at least two ways: The signal processing unit can use this as input for its settings, so it uses a measured response of the optical channel instead of an expected response. The OPU settings can be adapted in order to optimise spot shape and reduce



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